Linking Public Health Academia to Public Health Practice through Program Evaluation

Winnie Willis, ScD Gayle White, MPH

In the years following the publication of the first Healthy People objectives for the nation,1 several terms have been used to express the meaning and role of the community in public health. Among these are community participation, community partnerships, community health, and communitybased public health. Periodic updates on the progress toward attainment of these Objectives became known as performance measurement, which was formalized in the Government Performance and Results Act of 1993. This federal legislation has created the requirement for outcomes-based assessment of program performance and accomplishments at the federal, state, and local levels.

Concurrently, there has been renewed interest in collaboration between academia and public health practice to assure that there is a cadre of practitioners who have the "knowledge, skills and competencies necessary to perform essential public health services and other activities to improve the population's health."2 The Association of Schools of Public Health (ASPH) Council of Public Health Practice Coordinators recommended that decision makers in the professional public health schools "establish and enhance linkages with practice-based and community sector partners [in order to establish pathways] of interaction and increase the capacity of each to accomplish its mission."2

Barbara Israel et al. have published a comprehensive review of the literature on the principles, rationales, challenges, and facilitating factors for community-based research.³ Although

they present their analysis with a focus on research, the issues addressed are also applicable to community-based public health practice and teaching. They state that community-based work "aims to improve the health and well-being of the communities involved, both directly, through examining and addressing identified needs, and indirectly through increasing power and control over the...process."³

The Institute for Public Health at the Graduate School of Public Health (GSPH) at San Diego State University has developed a strategy for academic and practice linkage grounded in community-based public health principles.2-4 This strategy uses program evaluation as the methodology to support accomplishment of the missions of both academic public health and local public health and community agencies. Program evaluation provides public health academia with opportunities to address its mission of teaching, research, and service in the richness of a community context. Community agencies are able to assess and improve the effectiveness of the services they provide to accomplish their mission of improving the health and well-being of the community, as well as to be responsive to their funders' expectations for evidence of effectiveness. The interface between these missions, their "common ground," stimulates and sustains the practice/ academic linkage.

The Institute, which is the formal locus for public health practice at the GSPH, has recognized an opportunity to build linkages between the university and community-based agencies by providing program evaluation and technical assistance services. With public and private funders placing

increased emphasis on program evaluation when making grants, communitybased organizations have become more likely to seek independent evaluation services. The first agreement to conduct a three-year evaluation for a local Healthy Start grantee was signed in 1996. From that beginning, the Institute has undertaken about a dozen additional evaluation and technical assistance projects. Several organizations have become "repeat customers," requesting help with new projects based on satisfaction with Institute services on earlier evaluations. While many agencies contact the Institute because they are required to conduct a formal evaluation, some others have initiated a collaboration on their own because of a recognized need to plan for the future based on an objective assessment of current functioning and outcomes.

Methodology

Currently, the Institute Director is the faculty member who is the designated **Public Health Practice Coordinator for** the School. Staffing consists of a manager for operations and development and a manager for student and academic programs, two half-time evaluation specialists, a consultant epidemiologist, a graduate student, and a part-time administrative assistant. The Institute is the facilitator for community/academia collaboration and practice linkage. Facilitation of linkages means that the talent and resources of the GSPH are promoted and initiated to address the full scope of public health practice.

Table 1 presents an overview of the facilitation process as it applies to program evaluation. The timing of the initial contact is not always early enough

Association of Schools of Public Health • 1101 15th St. NW, Suite 910, Washington, DC 20005 (202) 296-1099 • www.asph.org

for the Institute to be involved with grant writing. However, a not-so-subtle shift is occurring in that direction, particularly among repeat clients. istrative load involved with project work, thereby reducing the time commitment. Time has traditionally been a barrier to faculty involvement in com-

ASPH REPORT

to expand on this initial collaboration by basing future research, teaching, or

service on the evaluation findings.

For the agencies, the goal of collaborating with the Institute has generally been simply to obtain a needed program evaluation. However, the collaboration can provide the additional benefit of significantly enhancing agency capacity. On all projects, the Institute involves the community agency so that the process of designing and implementing the evaluation becomes a shared effort, with continuing opportunities for the agency to be a decision-maker in the process.

Table 3 presents the Institute's protocol for evaluation. The evaluation protocol is actually used as a decision tree. At each step in the protocol the staff is identifying unique aspects of

Table I. Facilitation of Community/ Academic Linkages

- 1. Respond to evaluation inquiries from community agencies
- 2. Meet with interested agencies to explain the Institute's capacity and procedures
- 3. Write the evaluation section of the agency's grant application and the attendant budget
- 4. Orient the GSPH faculty member who will serve as PI for the evaluation
- 5. Initiate and process a memorandum of agreement
- 6. Participate in contract development
- 7. Set up administrative procedures
- 8. Implement the evaluation protocol, modifying the standard Institute protocol as needed
- 9. Share attendance with faculty PI at periodic meetings with the agency
- 10. Attend relevant conferences

Table 2 provides examples of the nature and variety of some of the Institute's current evaluation projects.

Each evaluation project has a GSPH faculty member as principal investigator (PI). The faculty member's primary role is to oversee the scientific aspects of the evaluation methodology, including incorporation of state-of-the-art of the literature on the public health problem being addressed. The faculty also provides leadership for the data analysis. The Institute staff's role is to maintain the agency contact (although this is shared by the faculty PI), to administer the evaluation project personnel and budget, and to implement the evaluation protocol on a day-to-day basis (including data entry, analysis, and report writing). The contribution of the faculty is recognized and rewarded as a highly valued commodity; however, compensation is provided on the basis of project budget size and Institute staffing needs.

This arrangement works well for faculty because it removes the admin-

munity-based practice. In addition, the arrangement provides an "entrée" into the community for faculty who may not have had previous access. Most importantly, participation as the PI for an Institute evaluation project provides opportunities for further career development. It allows the faculty member

| Agency Type | Public Health Issue | Outcomes Measured |
|--|--|---|
| Collaborative of community clinics | Disproportionate HIV infection among people of color | Effectiveness of prevention case management model in reducing high risk behaviors |
| Not-for-profit social service agency | Adolescent pregnancy | Increased knowledge of risks of sexual activity and strategies to postpone it following abstinence-based curriculum |
| Domestic violence shelter | Domestic violence | Increased knowledge of community resources and dynamics of domestic violence, improved self-esteem, and strengthened social support network following shelter stay |
| Statewide social service collaborative | Tobacco use | Effectiveness of intervention to encourage churches to adopt formal smoking cessation policies and education |

Association of Schools of Public Health • 1101 15th St. NW, Suite 910, Washington, DC 20005 (202) 296-1099 • www.asph.org

Table 3. Institute Protocol for Program Evaluation

- I. Participate in organizing an evaluation advisory team
- 2. Work with agency to clarify and refine the objectives of the intervention, focusing on results or changes desired
- 3. Determine what data are needed to measure desired results or changes
- 4. Determine if needed data are already being collected or if a new data collection process will need to be implemented
- 5. Implement agency training and technical assistance in either data collection scenario
- 6. Design associated computer databases
- 7. Implement agency training on databases
- 8. Implement data collection and database quality assurance
- 9. Analyze data and write periodic reports as defined in agreements

each agency's capacity, including staffing, knowledge base, and equipment. With these things in mind the Institute follows the appropriate decision pathway to design strategies for data collection, database development, and training and technical assistance. The protocol for each project is therefore unique, whereas the approach to protocol development is standard.

All Institute projects involve an evaluation advisory team comprised of agency members and Institute staff as the means to maintain communication in the evaluations. It is a forum in which partners have equal representation, and in which the work and the accomplishments can be shared. This keeps a balance of power and control over the direction and expectations of the process and the outcomes.

Clarification and refinement of the objectives of the intervention as well as the desired results and changes are critical to the evaluation design. A great deal of time, often in more than one meeting, is spent on bringing all parties to a clear understanding of the link between the results (outcomes) and the intervention (process). This includes time spent to assist with the agency's understanding of the decisions that govern the selection and use of both process and outcome measures.

Often the community-based agency realizes for the first time how the demands of the evaluation will impact their "real" agency capacity, which may be different from the capacity they represented in the application for funding. The Institute has been able to provide a presence, backed by experience, from this initial phase onward, including suggestions for modifications that the agency might be able to negotiate with the funder. Critical to the style of collaboration adopted by the Institute is the commitment to be a team player with the agency throughout the evaluation, rather than a spectator sitting in the bleachers to watch the game.

Many of the agencies have databases of some kind in place; often, however, these databases were not designed for systematic data collection. Typically, the ability to find data relevant to an individual for repeated services is not present, so technical assistance about the ability to document change at the level of the individual is incorporated into the early data system discussions. Only then can progress be made in the design of a useful data collection or management system.

Development of data collection forms is usually a collaborative

process, with the Institute or the agency taking the lead, based on agreements. Forms may be created for manual collection and then computer entered, or they may be developed directly on computer screens. Agencies have the option to have a database installed on their own equipment at their site(s) or to have all databases housed and managed at San Diego State. The arrangement for database locus as well as data collection and entry methods depends upon the agency capacity.

Training is provided for relevant agency staff on the overall methodology, and then on the specific role or task assigned to each person who will handle data collection or data management. Re-training and technical assistance is provided as needed, on an ad hoc basis. Quality assurance events and data quality checks are usually scheduled, but may occur at other times at the request of the Institute or the agency if there appears to be a breakdown in any aspect of the data collection.

Data analysis for written reports is usually scheduled on a quarterly basis. Quarterly analysis enables the Institute to track results and outcomes over time as well as to determine if experience with data collection is having a positive effect on data quality. Agencies with less data sophistication are being rewarded with data on individual clients over a series of encounters. The measurement tool may be a pretest-posttest methodology, but the value of the results to the agency represents far more than a percentage change in scores. It represents a success for their staff in the ability to connect the objective for the client with the outcome for the client, as well as the ability to collect data of a quality sufficient to meet the requirements of their funding agency. The more dataoriented agencies are beginning to use their quarterly project data as docu-

Association of Schools of Public Health • 1660 L Street, Suite 204, Washington DC 20036 (202) 296-1099 • www.asph.org

mentation of community needs in seeking additional funding.

Accomplishments and Lessons Learned

The Institute recognized the opportunity for community-based practice offered by their faculty and staff expertise in program evaluation. After three years of work in this capacity, the Institute is receiving multiple requests for evaluation assistance.

This demand has led to the inclusion of more of the School's faculty in the role of PI. From this community-based work they may, in the future, gain continuing latitude for their agendas in research, teaching, or service. The requirements for tenure and promotion can undoubtedly be met with the rigor necessary for peer-reviewed publications. The strategy employed by the Institute has faculty support because it relieves faculty of the day-to-day evaluation protocol activities and the project management.

It raises, however, the issue of funding for the Institute staff who carry that workload. This is an important issue because most of the evaluation budgets fall within the \$5,000 to \$15,000 per year range, so it takes several contracts to fund the Institute positions and to build a reasonable sense of permanency for the staff who take on this challenging work. Given the mode of continuous collaboration adopted by the Institute, the relatively small staff has a heavy workload. Several options are being explored to remedy this situation. Among the options are a modest increase in the minimum charge for an evaluation, a redistribution of responsibilities between faculty and Institute staff, and increasing the number of graduate students. Also under consideration is the pursuit of a grant for public health capacity building specifically to fund infrastructure development, thereby allowing charges

to community-based agencies to remain low.

As a result of a Town Hall Meeting event, funded by the Institute's Public Health Practice HRSA grant, it is evident that the Institute appeals to a variety of community agencies that want services other than program evaluation. These services include needs assessment, strategic planning, identification of potential funding sources, grant writing, design of public health interventions, training, development of educational materials, and annual report writing. As a result of the Town Hall Meeting, five agencies received assistance from faculty/ graduate student pairs for three months. As would be expected, these pairs created more work to be done, much of which is ongoing. The unmet need remains considerable because faculty and student resources are finite.

The Institute has committed to building the capacity and skill of practitioners in the community as well as to the education of students who matriculate for a degree in public health. This commitment is driven in part by the fact that less than thirty percent of the public health workforce has training in public health.5 For the communitybased agencies, the greatest value of the Institute's program evaluation may accrue from the capacity-building strategies built into the protocol and methodology. The success of a protocol is dependent upon the efforts of the agency in defining its need for evaluation, linking the planned intervention to the changes to be measured, assessing its staff's capabilities, and collecting data (often at multiple sites). They must also buy into modifying their service-oriented paradigm to include measurement of impact, while learning to practice collaborative skills needed to work with an unknown (maybe even distrusted) entity.

Anecdotal evidence suggests that collaboration with the Institute has

contributed to attainment of knowledge, skills, and agency capacity. Three projects have involved the development of on-site computer databases that serve agency needs beyond the evaluation, such as monitoring service delivery activities. Moreover, the Institute's training of agency staff for data entry and database management has been generalizable to other aspects of their work. When agencies with which the Institute has been working apply for additional funding or develop new projects, agency staff have demonstrated increased ability to formulate objectives and to identify reasonable ways to measure their attainment.

The environment at San Diego State University is one in which academic and community linkage is highly valued. Recognizing that scholarship has multiple dimensions, promotion and tenure decisions provide some evidence of progress toward building a structure that rewards faculty for community-based work. An informed faculty involved in community-based practice can provide leadership for new approaches to the cycle of redevelopment and transfer of knowledge as well as for the redesign of traditional systems of academic reward.

References

- Department of Health and Human Services (US). Healthy people 2000: national health promotion and disease prevention objectives. Washington: Public Health Service; 1991.
- Association of Schools of Public Health.
 Demonstrating excellence in academic public health practice. Public Health Rep 1999;114: 480-484.
- Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. Annu Rev Public Health 1998:19:173-202.
- Framework for program evaluation in public health. MMRW Morb Mortal Wkly Rep 1999;48(No.RR-11):1-35.
- Institute of Medicine. The future of public health. Washington: National Academy Press; 1988.

Association of Schools of Public Health • 1101 15th St. NW, Suite 910, Washington, DC 20005 (202) 296-1099 • www.asph.org